

## Claims

1. A cutting machine for organic plant materials, especially for tobacco, having a cutterhead mounted in a main frame, and a feeding-compacting arrangement frame, forming a stream of a fed material, comprising transporters feeding the material into a cutting zone, and means for compacting and/or polarizing mutual distribution of fed particles, characterized in that the cutterhead (2) is mounted in the stationary main frame (1), fixed advantageously to the floor, and a feeding-compacting arrangement frame (5) is moved along the horizontal guides (7).
2. A cutting machine according to claim 1, characterized in that the cutting head (2) is a cutterhead with the main axis of rotation being horizontal.
3. A cutting machine according to claim 2, characterized in that the cutterhead is provided with a number of cutting knives (13), symmetrically arranged around its perimeter, the number being divisible by 2, 4, 8 or 16.
4. A cutting machine according to claim 3, characterized in that the cutting knives (13) have cutting edges (10) situated at an angle ( $\delta$ ) relatively to the horizontal direction during the cutting/comminuting operation.
5. A cutting machine according to claim 4, characterized in that the distance (a) between the lower knife (12) edge of the

mouthpiece and a surface of a cylinder described by the cutting edges of the cutting knives (13) of the cutterhead is almost zero.

6. A cutting machine according to claim 4, characterized in that the angle ( $\delta$ ) is in the range from  $0^\circ$  to  $15^\circ$ , preferably from  $0^\circ$  to  $10^\circ$ .

7. A cutting machine according to claim 1, characterized in that the guides (7) are placed over the feeding-compacting arrangement frame (5).

8. A cutting machine according to claim 1, characterized in that it is provided with an integral control system (EC).

9. A cutting machine according to claim 1, characterized in that the main frame (1) is provided with shield elements for the cutting edges of the cutting knives (13) on the side of the access space (P).